REMARKS

Upon entry of this amendment, claims 1-46, 48 and 50-54 are all the claims pending in the application. Claims 47 and 49 have been canceled. Claims 53 and 54 have been added. No new matter has been added.

I. Request to Withdraw Finality of Office Action Dated February 28, 2003

The Examiner indicated that the Office Action dated February 28, 2003 is a Final Office Action. However, Applicant submits that the Office Action contains a new grounds of rejection that was not necessitated by an amendment made by Applicant.

Specifically, in the previous Office Action dated November 4, 2002, claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Nanto (U.S. Patent No. 5,952,782). In response to the previous Office Action, Applicant filed an Amendment on February 4, 2003, in which original claim 1 was rewritten as new claim 52. That is, claim 52 is identical to original claim 1.

In response to the Amendment, the Examiner issued the present Office Action on February 28, 2003, in which claim 52 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068). However, as claim 52 is identical to original claim 1, the addition of claim 52 certainly could not have necessitated the new grounds of rejection for claim 52.

Applicant recognizes that other claims were amended in the Amendment filed February 4, 2003. However, at least with respect to new claim 52, Applicant's Amendment clearly did not necessitate the new grounds of rejection for this claim.

Rather, it is clear that the new grounds of rejection was added by the Examiner due to the withdrawal of the primary rejection due to it being an improper rejection and not due to any amendment of the claims.

Based on the foregoing, Applicant submits that making the present Office Action final was improper and respectfully requests that the finality of the Office Action be withdrawn. If the Examiner maintains the finality of the previous Office Action, Applicant respectfully requests an explanation as to how the addition of claim 52 necessitated the new grounds of rejection.

III. Claim Rejections under 35 U.S.C. § 103(a)

A. Claims 1-5, 16, 21-23, 26-28 and 31-52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068). Applicant respectfully traverses this rejection on the following basis.

Claim 1, as amended, defines a novel combination of features which form an AC plane discharge plasma display panel. Included among the features of this new display panel is a single sustain electrode which is provided in common for a first and second pixel cell adjacent to each other in a column direction. Applicant submits that the claimed combination, including at least this feature, is neither taught nor suggested by the applied prior art.

The Examiner recognizes that Asano does not disclose a notch portion between pixel cells adjacent to each other in a row direction. To cure this deficiency, the Examiner applies Amemiya. Amemiya discloses a pair of electrodes Xi and Yi provided on a first substrate and a plurality of address electrodes 22 formed on a second substrate (see Fig. 1).

The electrode Xi comprises a base portion 30 extending longitudinally in a first direction and a plurality of projecting portions 32 disposed perpendicular to base portion 30 and extending toward electrode Yi (see Figs. 1 and 2).

Similarly, electrode Yi comprises a base portion 30 extending longitudinally in a first direction and a plurality of projecting portions 32 disposed perpendicular to base portion 30 and extending toward electrode Xi (see Figs. 1 and 2).

Claim 1 sets forth the feature of a plurality of electrodes provided on a rear substrate which extend longitudinally in the column direction. Based on Figure 1 of Asano, it is clear that the "column" direction corresponds to the direction in which address electrodes 22 extend. Thus, the projecting portions 32 of electrodes Xi and Yi also extend in the "column" direction while the base portion 30 of electrodes Xi and Yi extends in the "row" direction.

Claim 1, however, sets forth the feature of a single sustain electrode which is provided in common for a first and second pixel cell adjacent to each other in the column direction. That is, claim 1 requires that two adjacent pixels in the column direction utilize the same sustain electrode. Amemiya clearly does not teach such a feature.

In Amemiya, while the projecting portions 32 of either the Xi or Yi electrode are coupled between adjacent pixels in the "row" direction (via base portion 30), Amemiya fails to teach or even suggest the feature of a single sustain electrode which is provided in common for a first and second pixel cell adjacent to each other in the "column" direction. Furthermore, Asano fails to cure this deficiency of Amemiya.

Therefore, as the combination of Asano and Amemiya fails to teach or suggest all of the features of claim 1, Applicant submits that a prima facie case of obviousness has not been established and respectfully requests the Examiner to reconsider and withdraw the rejection. If the Examiner maintains this rejection, Applicant respectfully requests that the Examiner particularly point out the structure and passages in the applied prior art which teach the above discussed features.

Claims 2-5, 16, 21-23, 26-28 and 31-45 depend, either directly or indirectly, from claim 1. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

Independent claim 46 recites the feature of at least part of a display electrode being provided in common for pixel cells adjacent to each other in the first direction. As discussed above, the combination of Asano and Amemiya fails to teach or suggest such a feature. Accordingly, Applicant respectfully requests that this rejection also be reconsidered and withdrawn.

Claims 48, 50 and 51 depend, either directly or indirectly, from independent claim 46. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

Independent claim 52 recites, *inter alia,* "for neighboring pixel cells arranged in the column direction, sustain electrodes and scan electrodes are disposed to allow respective sustain electrodes and scan electrodes to be adjacent toe each other between neighboring pixel cells." Applicant submits that the combination of Asano and Amemiya fails to teach or suggest at least this feature of the claimed combination.

As discussed above, Amemiya discloses electrode which comprises a base portion 30 extending longitudinally in a row direction and a plurality of projecting portions 32 disposed perpendicular to base portion 30 and extending toward electrode Yi (see Figs. 1 and 2). Amemiya also discloses electrode Yi which comprises a base portion 30 extending longitudinally in the row direction and a plurality of projecting portions 32 disposed perpendicular to base portion 30 and extending toward electrode Xi (see Figs. 1 and 2).

While Amemiya discloses projecting portions 32 of electrode Xi and Yi which are adjacent to each other within a single pixel cell, Amemiya does not teach sustain electrodes and scan electrodes which are disposed to allow respective sustain electrodes and scan electrodes to be adjacent to each other between neighboring pixel cells in a column direction, as is required by claim 52. Indeed, Amemiya does not even remotely suggest such a feature.

Position of Electrode

Therefore, as the combination of Asano and Amemiya fails to teach or suggest all of the features of claim 52, Applicant submits that a prima facie case of obviousness has not been established and respectfully requests the Examiner to reconsider and withdraw the rejection. If the Examiner maintains this rejection, Applicant respectfully requests that the Examiner particularly point out the structure and passages in the applied prior art which teach the above discussed features.

B. Claims 6-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and further in view Nakajima (U.S. Patent No. 5,557,168). Applicant submits that the deficiencies discussed above regarding Asano and Amemiya are not overcome by Nakajima. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

C. Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Nakajima (U.S. Patent No. 5,557,168) and further in view of Tanabe (U.S. Patent No. 5,889,365). Applicant submits that the deficiencies discussed above regarding Asano and Amemiya are not overcome by Nakajima and Tanabe. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

D. Claims 11-15 and 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Nakajima (U.S. Patent No. 5,557,168) and further in view of Matsuzaki (U.S. Patent No. 5,939,828). Applicant submits that the deficiencies discussed above regarding Asano and Amemiya are not overcome by Nakajima and Matsuzaki. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

E. Claims 20, 25 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and Nakajima (U.S. Patent No. 5,557,168) and further in view of Fukuta (U.S. Patent No. 6,037,713). Applicant submits that the deficiencies discussed above regarding Asano and Amemiya are not overcome by Nakajima and Fukuta. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

F. Claims 24 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Asano (U.S. Patent No. 6,008,582) in view of Amemiya (U.S. Patent No. 5,640,068) and further in view of Matsuzaki (U.S. Patent No. 5,900,694). Applicant submits that the deficiencies discussed above regarding Asano and Amemiya are not overcome by Matsuzaki. Accordingly, Applicant submits that these claims are patentable at least by virtue of their dependency.

IV. New Claims

New claims 53 and 54 have been added. Applicants submit that new claims 53 and 54 patentably distinguish over the cited art based on the combination of features contained therein.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

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Date: May 28, 2003

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 47 and 49 are canceled.

The claims are amended as follows:

1. (Twice Amended) An AC plane discharge plasma display panel comprising:

a front substrate;

a rear substrate;

a sealing portion operable to encapsulate said front substrate and said rear substrate at a peripheral edge portion thereof to seal a discharge gas therein;

column ribs and row ribs operable to define pixel cells in a column direction and in a row direction, respectively, to thereby define the pixel cells in a matrix; [and]

plane discharge electrodes provided on said front substrate having a display electrode portion and a bus electrode portion; and

a plurality of electrodes provided on said rear substrate which extend longitudinally in the column direction,

wherein the display electrode portion comprises sustain electrodes and scan electrodes and the bus electrode portion comprises sustain-side bus electrodes and scan-side bus electrodes, [and]

wherein at least part of the display electrode portion has a notched portion or a cut-away portion between pixel cells adjacent to each other in the row direction, thereby providing each pixel cell with individually separated electrodes, and

wherein a single sustain electrode is provided in common for a first and second pixel cell adjacent to each other in the column direction.

46. (Once Amended) A display panel comprising:

a first substrate;

a second substrate provided opposite said front substrate;

a display electrode portion provided on said first substrate and extending longitudinally in a first direction; [and]

a bus electrode portion extending longitudinally in a second direction perpendicular to the first direction;

a plurality of electrodes provided on said second substrate and extending longitudinally in the first direction; and

ribs which define pixel cells in the first direction and the second direction, respectively, to thereby define pixel cells in a matrix,

wherein at least a part of the display electrode portion is provided in common for pixel cells adjacent to each other in the first direction.

50. (Once Amended) The display panel according to claim [49] 48, wherein the sustain electrode is the part of the display portion provided in common for pixel cells adjacent to each other in the first direction.

51. (Once Amended) The display panel according to claim [49] 48, wherein a gap is formed in the first direction within each pixel cell between the sustain electrode and the scan electrode.

Claims 53 and 54 are added as new claims.